

## 802.11b/g Wireless Mini PCI Card

The **WM2504** is a mini PCI card that connects your notebook to a wireless local area network. Incorporating the IEEE802.11g standard's mandatory modulation schemes, the **WM2504** is backwards compatible with all the existing 802.11b products already out there. Moreover, the high-speed transfer rate of up to 54Mbps makes it an essence for today's high-bandwidth demand.

The **WM2504** is a very small card that can fit into any notebook, handheld or desktop computer equipped with a Mini PCI (Type III B slot) interface for wireless network applications. It allows you to take full advantage of your notebook's mobility with access to real-time information and online services anytime and anywhere. It slides easily into the MINI PCI expansion slot to enable a wireless connection to your network.



### FEATURES

- Complies with IEEE 802.11b and 802.11g standard for 2.4GHz Wireless LAN.
- Compliant with PCI 2.3 Standard.
- Works with all existing network infrastructure.
- Complies with specific wireless products and services.
- Capable of up to 128-Bit WEP, TKIP and AES.
- Freedom to roam while staying connected.
- Up to 54 Mbps data transfer rate in 802.11g mode of operation.
- Supports Windows98/ ME/ 2000/ XP
- Lower power consumption.
- Easy to install and configure.

### SPECIFICATIONS

|                          |   |
|--------------------------|---|
| <b>Standard</b>          | IEEE 802.11b, IEEE 802.11g Standard   |
| <b>Host Interface</b>    | III-b mini PCI form factor (mini PCI interface 1.0)   |
| <b>Operating Voltage</b> | 3.3V (Vaux)   |
| <b>Power Requirement</b> | Power consumption at 11g<br>TX:441mA Rx:356mA<br>Power consumption at 11b<br>Tx:435mA Rx:355mA  |
| <b>Antenna Type</b>      | 2 Diversity U.FL Compatible Coaxial Connector   |
| <b>Frequency Range</b>   | 2.412GHz-2.4835GHz  |
| <b>Modulation</b>        | 11g:Orthogonal Frequency Division Multiplexing (OFDM)<br>54Mbps/48Mbps:QAM-64<br>36Mbps/24Mbps:QAM-16<br>18Mbps/12Mbps:QPSK<br>9Mbps/6Mbps:BPSK |

|                                      |  |
|--------------------------------------|--|
|                                      | 11b:Direct Sequence Spread Spectrum (DSSS)<br>11Mbps/5.5Mbps:CCK<br>2Mbps:DQPSK<br>1Mbps:DBPSK   |
| <b>Number of Selectable Channels</b> | USA, Canada (FCC): 11 channels (2.412GHz~2.462GHz)<br>Europe (CE): 13 channels (2.412GHz~2.472GHz)<br>Japan (TELEC): 14 channels (2.412GHz~2.4835GHz)  |
| <b>Modulation Technique</b>          | 802.11b: Direct Sequence Spread Spectrum (PBCC, CCK, DQPSK, DBPSK)<br>802.11g: Orthogonal frequency division multiplexing  |
| <b>Data Rate</b>                     | 802.11b(11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps)<br>802.11g(54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps)  |
| <b>Preamble</b>                      | 802.11b: Both Short and Long preamble<br>802.11g: Both Short and Long preamble   |
| <b>Security</b>                      | Hardware-Based Encryption/Decryption Using 64-, 128-bit Wired-Equivalent Privacy (WEP) Keys, WPA , WPA2 , WMM and CCX are also supported.  |
| <b>Output Power</b>                  | 54Mbps OFDM: 13dBm~15dBm;<br>11Mbps CCK: 16dBm~18dBm (average power)   |
| <b>Receiver Sensitivity</b>          | 802.11g (in 10% PER) -71 dBm(max.) at 54Mbps<br>802.11b (in 8% PER) -85 dBm(max.) at 11Mbps  |
| <b>Range</b>                         | Indoors: up to 100meters; Outdoors: up to 300meters  |
| <b>Media Access Protocol</b>         | CSMA/CA (Collision Avoidance) with ACK   |
| <b>Physical Specifications</b>       | Weight: 10g<br>Dimension: 59.75 (L) x 44.6(W) mm   |
| <b>Environment Specifications</b>    | Operating Temperature: 0~60°C ambient temperature<br>Storage Temperature: -20~70°C ambient temperature<br>Operating humidity: 90% maximum (non-condensing)<br>Storage humidity: 90% maximum (non-condensing) |
| <b>Supported OS</b>                  | Windows 98<br>Windows ME<br>Windows 2000<br>Windows XP   |
| <b>EMC Certification</b>             | FCC Part 15 subpart B / subpart C (15.247) in US. and ETSI EN-300328(pre-scan)   |